1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

TAPA

Paper mulberry (*Broussonetia papyrifera*), called *mahute*, was cultivated near the houses in stone enclosures (*manavai*, fig. 2). Today some paper mulberry trees grow wild on the inner slopes of Rano-raraku, but the steep sides of the crater can be reached only with great difficulty. 248

The best stalks for tapa making are the tender saplings which have neither side shoots nor buds. In ancient days they were collected by the men, who also peeled them. The bark must be peeled the same day or the day after the saplings are gathered. 287

A longitudinal slit is made with a knife (formerly an obsidian splinter) along the stalk, and the bark is pulled off with the hands (*ka ihi te kiri*) to obtain the greatest possible length. The outer bark is separated from the inner bast (*ka kuhure*) with a knife. The strips (*kohiti*) are rolled into coils to make them flat and smooth with the inner surface outside. The coils are soaked in fresh water for three or four days to loosen the fibers before final beating. Formerly they were first put in salt water, then in fresh water for several days. Women carried the strips of bast to the seashore and, squatting on the shore, beat the material for hours while their assistants carried water to sprinkle the bast. When they performed this work they were naked in order not to damage their clothing.

Tapa beaters (*iko*) were carved from *toro-miro* wood and were "about a foot long and 3 inches on each face. Some of the faces were smooth and others carved into grooves or ribs, to suit the different stages on the process of manufacture" (215, p. 467). Only two Easter Island tapa beaters have been preserved (fig. 22, *a*, *b*). Modern women use the first suitable branch to be found. 287 413

Zumbohm (230, vol. 5, p. 664) says that polished stones were used for beating tapa, and this statement is borne out by present-day natives. In Bishop Museum (B3496) there is a stone labeled "pounder" which may possibly have served as a tapa beater. So far as we know, the Easter Islanders never pounded taro or any other kind of food as do many Polynesians. No instruments which could be identified as pounders have been found on the island. The so-called pounder in Bishop Museum has a natural conical shape that fits the hand. The base of the cone shows traces of use as if the specimen had been employed to pound or mash some soft substance.

The anvil was usually a smooth boulder of more or less square shape. Near old settlements the Franco-Belgian Expedition found big boulders with one surface showing traces of use. The natives pointed them out as ancient tapa anvils. In more recent times the Easter Island women beat their tapa on big logs.

The woman knelt in front of the anvil and gently beat the *mahute* (*tutu te mahute*) strips, sprinkling them repeatedly with water. Nowadays the beating process is short, and the tapa is rather coarse. Thomson (215, p. 467) mentions two kinds of tapa—one fine, the other coarse and heavy. After beating, the tapa sheets were carefully stretched with the hand to prevent wrinkling or bulging. They were extended (*hakatere*) between banana leaves and put in the air to dry. The strips were sewn together with needles and fine strings of *hau*. The needles (*iri tia nua*) were generally of bird bones but perhaps some were of human bones. A great many are found in caves. Their length ranges from 3 to 21 cm., the most common length being 8 to 12 cm. Some needles are strongly curved; these are generally wide (0.5 cm.), and the side corresponding to the interior of the bone has a longitudinal depression. Single or double eyes are drilled near the rounded end of the needle.

I: Metraux E-5 (1934-1935): 1940
OY2 Easter Islanders OY2

287 413 Tapa strips were sewn together over the edge of a piece of wood carved into the form of a club (*paoa tia nua*) or a wooden or bone plate. A whalebone plate serving this purpose was collected by Geiseler (fig. 22, *c*) which is identical to a breast ornament (pp. 230, 231); its function as a support may be a later specialization.

294 287 Geiseler collected a robe made of four distinct layers of tapa. It is composed of basted strips 35 cm. wide which run across the longer side. The threads are 2-ply twisted cords forming rows of stitches at right angles to the length of the strips. The stitches are 1 cm. long, and at intervals of 4 to 5 cm. At the edges, the threads are brought back and fastened on the back surface with a running stitch 2 cm. long. Stitches were sometimes used for decorative purposes.

287 Two coarser tapa sheets were purchased by the Franco-Belgian Expedition. On both sheets, the strips are sewn together with irregular hemming stitches. The edges of the strips are sewn only where they tend to bulge. The sheets are sewn across with rows of basting stitches to hold the strips together. On one sheet these stitches are 7 or 8 cm. apart and on the other 2 cm. apart. The threads are fastened at the edges with a back stitch and the ends of the threads are lost in the material. No tapa from Easter Island shows any trace of the use of a glutinous substance to stick the strips together.

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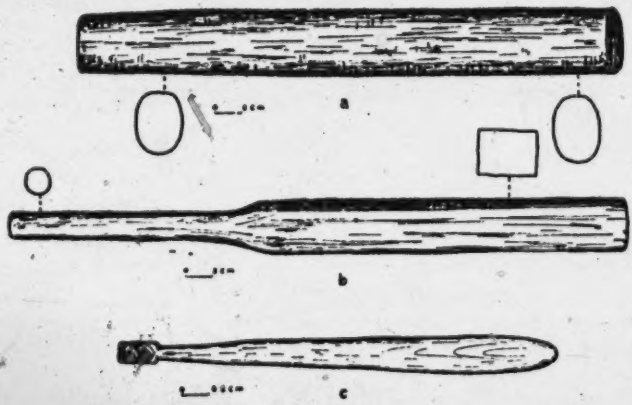

FIGURE 22.—Tapa beaters and support for sewing (Mus. f. Völkerkunde, Berlin): *a*, simple oval stick, probably a piece of wood picked up for temporary use and then discarded, 44.5 cm. long, diameter at center 5 cm. (VI.4876); *b*, flat beater with upper and lower surfaces slightly slanting toward proximal end, rounded, slightly pentagonal handle separated from beater by distinct shoulders on two sides, all surfaces smooth, shows signs of use; total length 46 cm., beater 4.5 cm. wide and 3.5 cm. thick, handle 2 cm. wide and 2 cm. thick at butt end (VI.4916, collected by Geiseler in 1884); *c*, wooden club used as support for sewing tapa, 102 cm. long (Geiseler coll. no. 61).

COMPARISON WITH TAPA ON OTHER POLYNESIAN ISLANDS

287 171 The paper mulberry did not thrive in the cold climate of Easter Island and the supply of bark cloth was always meager. The Easter Island tapa-making technique is, in general, identical with that of the rest of Polynesia.

The soaking of the bast in water for a few days—generally after a preliminary beating—is called "retting" by Burrows, who studied the distribution

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

of this process. He considers it typical of central and marginal Polynesia (Rapa, Austral Islands, Cook Islands, Marquesas, Society Islands, and Hawaii). In western Polynesia retting occurs only in Tonga. Preliminary beating before soaking is not mentioned for Easter Island, Tonga, and Hawaii.

The square shape of the Easter Island tapa beater (fig. 22, *b*) resembles slightly the Mangarevan specimens. The relative thinness of the Mangarevan tapa beaters is due to the use of pandanus which affords only a thin slab of hard wood. The scarcity of wood on Easter Island may have brought about the same form. Tapa beaters were reconstructed for me by an intelligent native. Little ethnological value may be set on specimens patterned after dim recollections; but though not grooved, their general shape was fairly near the ordinary square tapa beater with rounded grip, usual in marginal and central Polynesia.

The anvil on which the bark was beaten was a square stone, because no logs were available. Stone anvils are described for the Marquesas (142, p. 473), but they do not seem to have been used in any other part of Oceania.

Easter Island is the only place in Polynesia where strips were fastened together by sewing. Elsewhere in eastern Polynesia the strips were felted together; in western Polynesia they were pasted. Tapa sewing was practiced in Hawaii to join together several sheets in order to make a blanket of many layers and sewing has been reported in the Society Islands (26, pp. 104-109). The basting stitch, used exclusively on Easter Island, is found on some old Hawaiian tapa.

Needles identical to those used on Easter Island for sewing tapa have been found in New Zealand and the Chatham Islands. They are probably pre-European, but no satisfactory suggestion has been made as to their use. The similarities between Easter Island and New Zealand needles are so great that details such as the occasional presence of two eyes on one needle, are present in both regions. The Easter Island needles like those of New Zealand have very small eyes which were bored by a technique which is puzzling. Steele (211, p. 187) supposes that in New Zealand these eyes were drilled either with a mature-bone drill on a green-bone subject, or by sawing on both sides of the needle with obsidian splinters until a hole appeared; the latter technique was apparently employed on Easter Island. Among the needles I collected on Easter Island some are curved, a form which also occurs in New Zealand. Needles with eyeholes were employed for sewing tapa in Hawaii, as on Easter Island. The specimens mentioned by Brigham are especially long and thick and more like the needles of Tonga, Fiji, and Wallis Island for sewing mat sails than the delicate bone needles of Easter Island.

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

Many of the men wore a ring about two inches thick, strongly and curiously plaited of grass and sitting close round the head. This was covered with great quantities of the long black feathers which decorated the neck of the man of war bird . . . and still others wore a simple hoop of wood, round which a number of the long white feathers of a gannet hung nodding and waved in the wind. 291

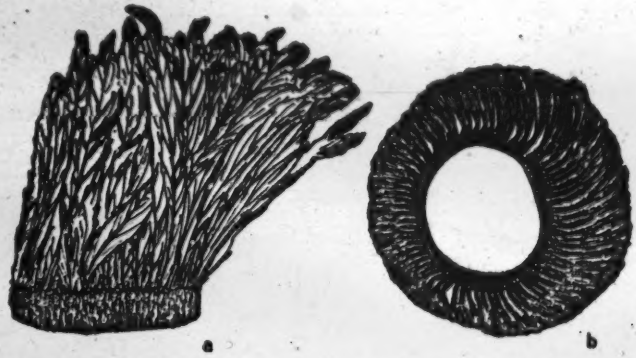

Figure 23.—Feather headdresses: *a*, diadem, band 45 mm. wide, feathers 390 mm. long (Univ. Pennsylvania Mus. 18053); *b*, circlet, four coils of frame wound with paper-mulberry bast string, coils superimposed and fastened together by seven strings at intervals of 80 or 90 mm., each feather bundle composed of seven or eight dark cock feathers split lengthwise and trimmed even at outer ends, wrapping of feathers 10 mm. long, feathers 110 mm. long, diameter of frame 180 mm., width of frame 40 mm. (5448).

No traveler except G. Forster alludes to circlets made of feathers of birds other than hens or cocks. Circlets are no longer used on Easter Island. At the time of Routledge (1914) there were some people who were still able to make them, but in the last 20 years cone-shaped caps have taken their place. The three circlets in Bishop Museum (fig. 23, *b*) and the other specimens I have examined in various museums are all made according to the same technique which is at once simple and very ingenious: 291 287

The circlets consist of several superimposed coils of bast material to which are attached continuous lines of horizontally projecting feathers. The core of the coils is made of strips of paper mulberry bark, sometimes of rush, wound spirally with a strip of paper mulberry bast. (The technique is shown in figure 24.) Several of these coils are placed one above the other and lashed together at spaced intervals by string. Because each coil is independent of those above or below, this technique cannot be classed with coil work proper. It will be referred to as "false coil" work. The number of coils varies in different specimens: the three headdresses in Bishop Museum have respectively four, five, and six coils with a total depth of about 40 mm. A circlet in the Museum für Völkerkunde, Vienna (22879), has a foundation coiled 10 times and a depth of 110 mm. Bundles of feathers, wrapped together with a strip of paper mulberry bark (fig. 24, *b*) are laid on the coils so that they project horizontally and are fastened by a string of *hau* or paper mulberry bark which runs transversely around the coil covering it entirely (fig. 24, *c*).

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

291 287 The headdresses I have seen are all made of chicken feathers. Most of them are black, but some are made of yellow, red, brown, speckled, and white feathers, used alone or in combination. In many headdresses the feathers are assembled without any modification, chosen so as to be of equal length. Sometimes the feathers are split lengthwise (Bishop Mus., 5448, Vienna 22784 and 22785) or trimmed even at their outer ends. The feathers project 200 mm. from the frame in two of the Vienna specimens (22877, 22879) and 120 mm. in the largest of the Bishop Museum circlets (5969). The usual width of the feather brim is 120 mm.; 40 mm. may be considered a minimum (Vienna 22874).

One feather circlet (Vienna 22872) has a frame made of six coils reaching a depth of 57 mm. Five of these coils carry short, split, black feathers with the seized ends set obliquely against the foundation so that feathers are closer to them than usual. The feathers of the upper coil are set radially, the seized part being at right angles to the coil. Each of these feathers is prolonged by a supplementary feather tied at three places near its end, so that the total length of these projecting feathers is 310 mm. A similar headdress is preserved in the Museum of Munich (diameter of circlet 148 by 190 mm.).

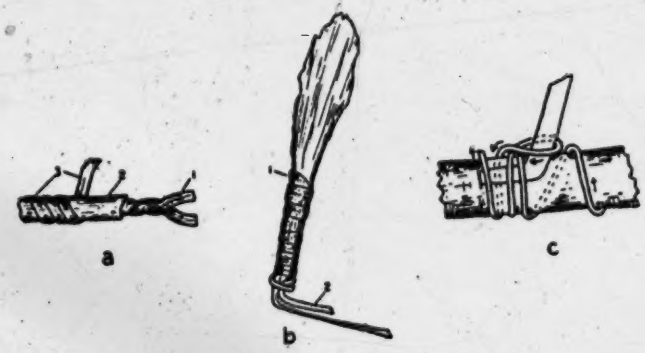

FIGURE 24.—Techniques of feather headdresses: *a*, foundation with central cord (1) of *hau* bast 4 mm. thick, with longitudinal wrapping of paper mulberry bast (2) and outer spiral wrapping of paper mulberry bast (3); *b*, bunch of feathers with lower ends wrapped in strip of paper mulberry bast 10 to 20 mm. long, with commencement buried under wrapping turns (1) and end of wrapping (2) tied in half hitch, feathers and bast strip bent at right angles; *c*, lashing of feather bundles to foundation with string of *hau* cord.

291 There are different kinds of circlets characterized by the length, the color, or the arrangement of the feathers. Each, known by a special name, was worn on specific occasions and often had a symbolic meaning. Geiseler (87, p. 52) and Thomson (215, pp. 535-536) have recorded the names of many of the old circlets in addition to some information concerning their special uses:

291 554 *Hau hichie* were circlets made of five or six superimposed coils to which feathers from the wings and tails of black hens were fastened. The feather ends were trimmed, with the exception of a row of long black feathers which were fixed on a coil at wide intervals. These large and heavy headdresses were worn by chiefs at feasts and were insignia of high office. Often they were kept in place by a strap of tapa cloth under the chin.

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OY2 Easter Islanders OY2

Hau hurahura were small crowns of variegated feathers from the cock's neck, principally the red (*hura*) feathers. These were worn by warriors in time of war. Such feathers fluttered and gave "a very warlike appearance to the warriors when they ran or danced." Similar circlets, of a smaller size, were worn by boys and girls as adornment for the dance (87, p. 35).

Hau peu-teu-ki were headdresses "of long, black, green, and variegated feathers worn by dancing people" (215, p. 535).

The *hau taru* was a "small headdress of trimmed feathers ornamented by long tail feathers behind; used by chiefs on occasion of ceremony" (215, p. 535).

The *hau tuero*[33] was made of long cock feathers and was "used in dancing and formerly at marriage feasts."

The *hau pineï* had short black feathers.

The *hau koiro* had long, straight, projecting feathers, and was the insignia of the leading dancers.

The *hau teatea* (white headdress) was made from the feathers of white cocks which are said to have appeared on the island in the time of King Rokoroko-hetau.

The *hau veri* is supposed to have been the headdress of the king.

Teketeke was the name given to the short, trimmed feathers of a circlet, as opposed to the long, projecting feathers in front. When a man was enraged against another or wanted to avenge himself for some grave injury he turned his headdress and wore the short trimmed feathers in front. The circlets of short black feathers were also called *hau teketeke*.

Diadem

An Easter Island diadem (fig. 23, *a*) acquired by the Museum of the University of Pennsylvania (18053) in 1891, is constructed on the same fundamental principle as the circlets described above, though it presents several new features:

This diadem consists of two parallel rows of feathers extending vertically from a circular band made of the leaf sheath of the banana. The feathers are said to be those of the frigate bird, but they are probably cock hackles. The inside row is composed of pairs of feathers tied in bundles and inserted into the wrapping of a coil made like that shown in figure 24. This coil with feathers is attached to the upper rim of the banana leaf-sheath band. The outer row is composed of pairs of feathers tied together with a tapa strip and fastened to the upper part of the leaf-sheath band by a continuous thread which makes half hitches around each bunch of feathers and transversely wraps the entire band.

Crescents

In the collection of the Museum für Völkerkunde, Vienna there is a crescentic, feather eyeshade (fig. 25, *a*) similar to one in Thomson's collection (215, p. 535, pl. 54, fig. 1; see also Cook, 53, vol. 1, p. 290).

This type of headdress (fig. 25, *a*) consists of three superimposed coils, identical to those in the feather circlets. The upper and the lower of these coils bear feathers, attached as in the circlets but at the front and sides only. These feathers extend beyond the frame for 96 mm. in front and for 43 mm. at the sides. The back of the frame is without feathers and is wrapped by a narrow strip of paper mulberry bast. The two layers of feathers are held together by six rows of black, 2-ply thread, evenly spaced and running parallel to the curve of the foundation coils. In each row three threads

[33] Brown (27, p. 169) describes the *hau tuero* as "a hat for the dances, made of the tail feathers of the white *tavake* . . . though the king never fought he generally wore a feather-hat called veri just before a battle." Tepano, who was Brown's informant, never mentioned such a headdress to me.

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

are used, one above the upper layer, one below the lower layer, and a third which is wrapped with a loose spiral around the upper and lower threads by passing between the feather tufts. Each of the nine long black feathers which project in the front is actually two feathers placed end to end and tied together in three places. They extend 80 mm. beyond the feather tufts.

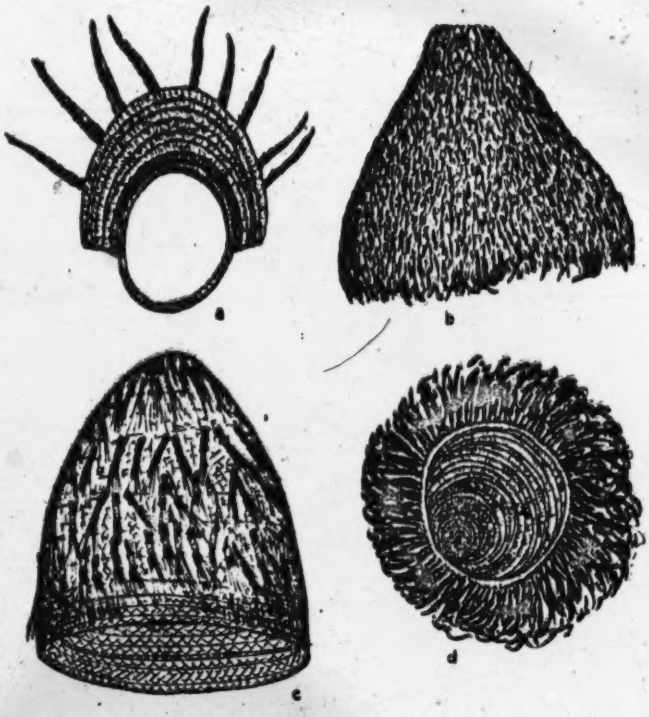

FIGURE 25.—Feather headdresses. *a*, feather crescent (Mus. f. Völkerkunde, Vienna, 22880): short black feathers, with some white ones, caught by continuous 2-ply cord between two coils separated by another coil and held together by six rows of threads; long feathers 133 mm. long, maximum width of feather layer 80 mm., diameter of circlet from front to back 203 mm., and from side to side 168 mm. *b* and *d*, outer and inner views of conical feather cap (Mus. f. Völkerkunde, Vienna, 22871): feathers attached to coils as in figure 23; outside height of cap 315 mm., inside height 235 mm., diameter of rim 190 mm., width of coil 9 mm., length of feather bundles 120 mm. *c*, conical feather cap (*hau moroki*, 5972): foundation formed of plaited strips of bulrush 25 mm. wide, bunches of feathers wrapped with narrow strips of bulrush and tied to cap with 2-ply cords of bulrush or *hau* bark; top of cap closed with coarse net; height 236 mm., diameter of rim 165 mm., width of band 31 mm.

1: Metraux E-5 (1934-1935). 1940
OY2 Easter Islanders OY2

Conical Caps

The modern conical caps (*hau moroke*) are modeled after a very old type, though the ancient technique has been forgotten. The modern headdresses are curios without practical use and are made in the same way as the modern hats adopted from Tahiti. Of the early visitors to Easter Island, Forster (83, vol. 1, p. 565) is the only one who mentions the caps: "Others had huge bushy caps of brown gulls feathers, which were almost as large as the full bottomed wigs of European lawyers." One such cap, made according to ancient pattern, has been preserved in the Museum für Völkerkunde, Vienna, in the Westenholz collection (fig. 25, *b*, *d*).

This type of headdress is derived directly from the ordinary circlet. Like the circlet it has a cord to which feathers are attached on one side, but this foundation, instead of forming a cylindrical ring, is wound spirally beginning at the top, each coil being a little larger than the preceding one, thus giving the headdress a conical shape. The coils are tied together with a string as are the coils in ordinary circlets.

Modern feather caps have a frame of plaited rush wound spirally from the top down, upon which bunches of feathers are sewn for decoration (fig. 25, *c*).

The plaited band is made of rush strips 6 to 10 mm. wide and plaited in twilled twos. At the edges of the band the strips are turned back to present in alternation their smooth outer and rough inner surfaces. At the top the plaited band is twisted and folded back to cover the opening. The lower edge of the conical cap is inserted in a separate plaited band folded lengthwise and sewn along the rim. In one specimen (B. Mus. 5970) the lower rim is reinforced by a wide piece of tapa sewn along the border and extended to line the interior.

The ends of the feather clusters are wrapped with strips of paper mulberry bark. The bunches are tied perpendicularly, forming parallel rows, with the tops of the feathers extending downward. In the best specimens each row overlaps the next one, and the entire cap is covered on the outer surface by feathers. On the top the feathers are sewn tightly and conceal entirely the beginning of the work. The top of one cap (B. Mus. 5972) is covered by a little net work made with the same kind of *hau* string as that used in fastening the feathers.

Another cap (B. Mus. 5990) is particularly interesting as a link between the ancient and modern types. It consists of a plaited band 22 mm. wide wound spirally. The feather bundles, instead of being sewn perpendicularly to the band, are fixed lengthwise to strips of rush forming a long cord coiled round the cap and loosely tied to it. The principle of the technique is the same as that of the old caps, but the coil foundation is supported by the plaited frame. This cap is 192 mm. high, with a rim 165 mm. wide, and the plaited band is 25 mm. wide.

Feather Containers

Cherished feathers, particularly those of white cocks, were kept in gourds or banana-leaf containers and taken out when a headdress was to be made (194, p. 218). The feathers were hackle cock feathers, many of them tied in pairs with fiber. The tufts were frequently wrapped with tapa.

One container in the Museum für Völkerkunde, Vienna (22881), is made of four pieces of sheaths stripped from the banana trunk and cut in broad bands 655 mm. long and 100 mm. wide. These are placed side by side to form three compartments. At the bottom they are doubled up and sewn together with a continuous thread of paper mul-

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

bered by modern natives. The origin of these hats cannot be doubted for the technique, the material, and the decoration are typical for Easter Island.

One of these headdresses (fig. 26, *b*) is a hat with a rounded crown and a narrow brim made of bulrush bands plaited in check. These bands are wound spirally and held together with strips of bulrush. The outside of the hat is covered with a piece of painted tapa.

On each side of the crown there is a human face modeled in relief and painted on the tapa. The outline of the face is formed by two superimposed rolls of bulrush wound with a strip of paper mulberry bast sewn onto the crown. The nose is a rounded prominence of the same material and fixed in the same way in the middle of the face. These crude features are covered with painted tapa. The eyes and the mouth are painted black, the nose and the cheeks are red. The tapa covering the brim is decorated with a red band and a series of black dots. On the top of the crown a red band alternates with a white one. *Some dots and lines are still visible.*

The hat was held in position by a 2-ply fiber string passing under the chin.

The other headdress (fig. 26, *a*) is a circlet with a human face in front. It is completely covered with tapa, which prevents any close study of the technique of the frame. The ring forming the circlet is made of two bulrush rolls tied together with *hau* strings. The front part of the headdress is modeled into a grotesque human face by means of bulrush rolls sewn to the foundation ring. The eyebrows are two wide arches raised above the ring, the cheeks bulge as if stuffed. An oval ring outlines the protruding mouth. The nose is a round protuberance between the eyebrows and the mouth. The eyes are oval discs of tapa and bulrush sewn to the tapa covering.

On the top of the eyebrow arch is a horizontal black line, on each side of which are alternating fields of red and black dots separated by vertical black lines. A wide band of red crosses the region of the eyes and the nose. On both cheeks there is outlined an elongated oval pointed toward the back, whose surface is covered by alternate fields of red and black dots separated by vertical lines. Similar dots occur on the mouth region. These motifs probably represent tattooing.

FIGURE 26.—Headdresses: *a*, tapa-covered circlet with human face in front, inner diameter 30 cm., height of face 12 cm. (Peabody Mus., Cambridge, 53541). *b*, hat of plaited bulrush covered with painted tapa with shallow crown and narrow brim: 1, part uncovered showing plaited foundation; 2, bulrush bands defining uncovered face; 3, covered bulrush bands defining covered face (Peabody Mus., Cambridge, 53540).

COMPARISON WITH OTHER POLYNESIAN HEADDRESSES

The feather circlets of Easter Island are similar to feather headdresses described by Laval for Mangareva (28, p. 172). Circlets of pigeon or frigate

I: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

bird feathers are frequently mentioned by early voyagers to the Tuamotus; the only known specimen is formed by split black feathers lashed successively to some foundation hidden by the spiral turns of a continuous 2-ply sennit cord (74). This technique is fundamentally like that of Easter Island. A feather ornament described by Linton (142, p. 433) from the Marquesas is not properly a circlet, since it ties under the chin. However, the feathers project on the head as in the Easter Island circlet. The quills of the feathers are wrapped against a core of twisted coconut fiber.

The only parallel which may be proposed for the Easter Island conical feather hats are the cone-shaped sennit skull caps of the Cook Islands which were sometimes covered with feathers tied to light rods (33, p. 92). It must be stressed, however, that this analogy is purely superficial, since the basic techniques are different.

If the Easter Islanders actually wore in their hair bunches of feathers attached to small sticks, this ornament was probably similar to the long feathers attached to smooth sticks which were used in the Marquesas (142, p. 434) and in the Tuamotus (74).

Ear Ornaments

Both men and women had their ear lobes pierced and the lobes distended "to near three inches in length" (53, vol. 1, p. 291).

These holes were pierced with a sharpened stick. At first only the point of the stick was left in the hole, but gradually the thicker part of the implement was pushed forward to widen the opening. Then a sugar cane leaf, a strip of bark, or white down of feathers rolled up like a scroll was inserted in the opening and gradually stretched. Finally the ear lobe became like a thin strap which fell down on the shoulder.

It is impossible to tell whether the elastic substances were actually ornaments or were used to keep the holes at utmost extension. Probably they were both. Some people, when not wearing any ornament, turned the rent lobe over the upper part of the ear.

Another kind of ear ornament, probably used only on exceptional occasions or by certain persons, was the ear plug described by Roggeveen (186, p. 15) as "roundish or oval, having a diameter of about two inches measured through the widest section, and one and a half inches through the narrowest, being three inches, at a guess, in length." These ornaments were of carved shark vertebrae (*ivi mango*), but some must have been made of shells. (See 53, vol. 1, p. 291.) One such shark-bone ornament, in the Museum für Völkerkunde, Berlin, has been published by Ratzel (184, vol. 2, p. 44). Palmer (171, p. 172) writes that he obtained an ear ornament of wood, the size of a fist, carved into faces and joined together. As there is no reference to wooden ear ornaments (for Behrens, on whose authority Palmer relies, speaks of white balls, without indicating the material), it is probable that the ornaments he gathered are simply *tahonga* (wooden pendants), which his de-

1: Metraux E-5 (1934-1935) 1940
OY2 Easter Islanders OY2

and was then put into a piece of tapa and wrung (*hakahihi* or *tatau*). The liquid and starch (*pia*) were strained (*tehe*) into a calabash (*ki roto ki te ipu*), where the starch settled to the bottom. The water was decanted or left to evaporate. All my informants agreed that the latter process consisted in leaving the starch in the air to dry (*he tauaki no hakapakapaka*). Probably the *renga* was cooked in special containers as on Mangareva and Samoa. The yellow powder which was obtained after this long preparation was mixed with sugar-cane juice and rubbed on the body. The sugar-cane juice (*pua oura*) used as an adhesive came from dry stalks peeled with an obsidian knife and pounded between two stones (*tingitingi*). This sticky substance was mixed with both turmeric and *ngarahu* (charred ti leaves).

G. Forster (83, vol. 1, p. 564) writes on the application of dye to the body: "The women were seldom satisfied with their natural brown colour, but painted the whole face with a reddish brown ruddle, over which they laid on the bright orange of the turmeric root; or ornamented themselves with elegant streaks of white shell-lime." Beechey (15, vol. 1, p. 48) describes the painting of the natives as follows: "Some [men] had their faces painted black, some red, others black and white, or red and white, in the ludicrous manner practised by our clown, and two demon-like monsters were painted entirely black." According to Eyraud (81, vol. 38, p. 56) the women used only red colors, whereas the men smeared themselves with any kind of dye. Some idea of the face painting of the natives can be gained from a tapa image in the Peabody Museum (fig. 30).

The head of the image is banded from the top of the skull to the mouth, by eight broad strips of black, white, and orange. The mouth region is stained in orange (turmeric). The black bands could represent tattooing but they are darker than the actual tattooed surfaces and combine with the white and orange stripes that undoubtedly represent painting. This image may not be the exact model of a painted and tattooed man, for there is no indication of hair; the painted stripes could have been arranged in this fashion only if the individual had been carefully shaven.

For dyeing cloth the dry starchy turmeric was diluted with water and applied to the cloth with a brush made of feathers (*huruhuru moa*). A very simple method of dyeing consisted in chewing the turmeric and spitting the dyed saliva on the cloth. The sheets stained in this manner were called *pua roiroi*. The cloth made now for trade is decorated with fanciful designs drawn with a piece of turmeric moistened in water.

Tattooing

Implements

The art of tattooing (*ta*) was abandoned shortly after the arrival of the missionaries. It was practiced by experts (*maori* or *takona*) whose work was supervised by the king. Their implements were a tattooing comb (fig. 32, *a*), a wooden mallet, and a calabash or box containing dark pigment.

Easter Island tattooing combs (*uhi*) are preserved in the Museum für Völkerkunde, Berlin (VI.4921) and in the Museum für Völkerkunde, Vienna (22830-22834). The

4:Metraux E-5 (1934-1935) 1945
OY2 Easter Island OY2

291
287

1. VICTORIA RAPAHANGO, ONE OF THE LAST DESCENDANTS OF THE KINGLY FAMILY, PEELING PAPER MULBERRY STEM TO MAKE BARK CLOTH.

2. NATIVE GIRL BEATING PAPER MULBERRY BARK TO MAKE A FABRIC.

[END PLATE 4]

5: Roggeveen T-5 (1721-1722)1908
OY2 Easter Islanders OY2

After the astonishment and terror of the natives were somewhat allayed, on their seeing that our hostilities were not persisted in, they were given to know by signs that the victims had threatened to make an assault upon us by stone-throwing, and the inhabitants, who had been just in front of us all the time, approached our leaders again; in particular one who seemed to be in authority over the other headmen, for, giving a general direction that everything they had should be fetched and laid before us, including fruit, root crops, and poultry, the order was promptly obeyed with reverence and bowing by those round about, as the event proved; for in a little while they brought a great abundance of sugar-cane, fowls, yams[1], and bananas; but we gave them to understand through signs that we desired nothing, excepting only the fowls, which were about sixty in number, and thirty bunches of bananas, for which we paid them ample value in striped linen, with which they appeared to be well pleased and satisfied. By the time we had fully investigated things, and especially their cloth stuffs and the dyes of them, and also the supposed silver plates and mother-of-pearl, it was found that they were made up of pieces patched together; that is, that the wraps worn on their bodies were composed of some field-product, sewn three or four ply in thickness, yet neat and trim, which material (as called in the West Indies) is a sort of *Piet*: further, that the soil of the country (as we saw in several places) was red, and yellowish, into the which when mixed with water they dip their garments and afterwards let them dry, which shows that their dye is not fast, for when felt about and handled one finds the colour come off on one's fingers, not only after touching new articles but also from old and worn ones. The plates imagined to be of silver were made out of the root of some

[1] *Ubaswortels*, a coined hybrid word; from the Malay *ubi*, a yam, and the Dutch *wortel*, a root.

7: Anonymous T-5 (1770)1908
OY2 Easter Islanders OY2

It need not be said that the islanders were terrified at the noise of the gunfire and musketry: that must happen to people who have not used or seen such inventions.

The women made use of wraps or cloaks: one which covers them from the waist downwards, and another about the breasts. There are others also who wear only a rag or strip of some root, which they place in front like the men. They have several very low and small huts, and some like the one first mentioned.

Throughout the island, but especially near the sea-beach, there are certain huge blocks of stone in the form of the human figure. They are some twelve yards in height, and I think they are their idols. They could not bear to see us smoke cigars: they begged our sailors to extinguish them and they did so. I asked one of them the reason, and he made signs that the smoke went upwards; but I do not know what this meant or what he wished to say.

I fancy that the cloaks or wraps of the said islanders are made from the fibres of stems of the banana plant, which, when dry, they put together as may suit their purpose[1]: it is not woven, but is joined together by strands of the same material which they thread on bone needles of the size of a cloak-maker's needle. They make fishing-lines of this same fibre, as well as nets after the fashion of our small nets; but of little strength.

They have very little wood; but if they were to plant trees there would be no lack of it; and I believe that even

[1] The material was really the white inner bark of the paper mulberry tree (*Broussonettia papyrifera*); and the thread used for attaching the segments together was probably made from the *Hibiscus tiliaceus* bark. A Spanish naval officer may well be excused for falling into this error, as the employment of the fibre of *Musa textilis*, known to him as *abacd* and to ourselves as 'Manila hemp,' would doubtless have come under his observation in the Philippine Islands; and perhaps his running rigging may have been made of it even in those days.

9: Forster T-5 (1774) 1777
OY2 Easter Islanders OY2

We could not perceive that they had any arms, which we immediately interpreted into a ſign of a peaceable diſpoſition. In a few minutes we ſaw them launch a canoe, in which two men came off towards us. They were along ſide in a ſhort time, having paddled very briſkly, and immediately called out for a rope, naming it by the ſame word as the Taheitians. We had no ſooner thrown them the rope, than they tied a great cluſter of ripe bananas to it, making ſigns for us to haul it up. The ſudden emotions of joy in every countenance, at the ſight of this fruit, are ſcarcely to be deſcribed; they can only be felt in their full extent by people in the ſame wretched ſituation with ourſelves at that time. At leaſt fifty perſons endeavoured to begin a converſation with the people in the canoe, who being addreſſed by ſo many at once, could not anſwer one of them. Captain Cook ſent for ſome ribbands, to which he tied ſome medals and beads, and lowered them down in return for their preſent. They ſeemed to admire them much, but haſtened aſhore with them immediately. In dropping aſtern, they faſtened a ſmall piece of cloth to a fiſhing line which we towed after us; it was immediately hauled up, and appeared to be made of the ſame bark as the Taheitian cloth, and coloured yellow. From a few words which they pronounced, we concluded their language to be a dialect of the Taheitian, which we had now found in both extremities of the South Sea. Their whole appearance

1774. MARCH

175X 609

[287] ● 175X [197]

10: Cooke D-5 (1886) 1899
OY2 Easter Islanders OY2

593 586 of injuries inflicted by her husband in a moment of blind rage over some grievance, fancied or real. In this connection it may be mentioned that subsequently this same woman went to nurse Pakomeo, previously mentioned, who was ill at the time. Upon the recovery, so well pleased were they with each other that she abandoned her cruel spouse, remained with Pakomeo, was living with him as his wife at the time of our visit, and the arrangement seemed mutually satisfactory.

304 [178] The custom of tattooing has fallen off within the last few years and is now rarely or never practiced. It is only among the adults, more especially among the older people, that good examples may be found. Unlike the inhabitants of other islands, where a standard pattern is adhered to, the Rapa Nuiis seem to have affected no uniform fashion nor limited themselves to any particular style. The custom obtained alike among the male and female members of the community. Generally speaking, the ornamentation was as follows: A narrow band around the upper part of the forehead, at the edge of the roots of the hair, with little balls, each joined to the band by a stem, pendant from it, the whole simulating a coronet; a line around the outer free edge, the helix, and lobe of the ear; a line around the edge of the lips; the neck in its entire circumference, either in straight lines, vertical or oblique, or with the lines wavy; three radiating exclamation marks beneath each ear, common among women at the present day; a girdle about the waist, in broad bands, with an attempt at lace work, or fringe, from which rise heavy lines, at the ends of which, toward the axillæ, are fanciful figures resembling faces, with a larger face in the middle of the back; fine lines down the thighs anteriorly; heavy, undulating bands posteriorly, running over the buttocks toward the waist; wavy or straight perpendicular lines, terminating in points, around the legs, and elsewhere.

[386 824] The material used in tattooing is made of the soot obtained by burning a plant with a leaf similar to our Indian corn, and called by the natives *ti*, moistened with the expressed juice of a berry similar to our pokeberry, and called *poporo*. Pieces of bone, finished like a fine-toothed comb, or fish bones made fast to a short stick, are used to prick the skin by holding in contact with the surface and striking it a brisk blow.

291 [386] Before the advent of the missionaries the Rapa Nuiis possessed scant wardrobes. They made a coarse cloth woven of the fibers of the inner bark of the *mahuti*, Chinese paper mulberry, or of the *burau*, another fibrous tree, which they wore about the shoulders and loins. This cloth [714 411] was also used, in the manner of a shield, as a protection in battle against the enemy's spears, which latter was, with the exception of the war club, their principal weapon, the head being made of obsidian, numbers of which may be found on the island. They also made siapu, or tapa, as ● [287] do the natives of other islands, by beating out the bark and wearing the same as a breechcloth. With the coming of the missionaries civilized clothing was introduced and is now generally worn, comprising coat, 291 177 shirt and trousers, among the men, and a loose gown of cotton mate-

15:Routledge E-5 (1914-1915) 1919
OY2 Easter Islanders OY2

The food consisted of the usual tropical products such as potatoes, bananas, sugar-cane, and taro. Animal diet formed a very small part of it, rats being the only form of mammal; but chickens played an important rôle in native life, and the remains of the dwellings made for them are much more imposing than those for human beings. They are solid cairns, in the centre of which was a chamber, running the greater part of their length; it was entered from outside by two or more narrow tunnels, down which the chickens could pass. They were placed here at night for the sake of safety, as it was impossible to remove the stones in the dark without making a noise (fig. 86). Fish are not very plentiful, as there is no barrier reef, but they also were an article of diet, and were bartered by those on the coast for the vegetable products obtained by those further inland. Fish hooks made of stone were formerly used, and a legend tells of a man who had marvellous success because he used one made of human bone. The heroes of the tales are also spoken of as fishing with nets. There are in various places on the coast round towers, built of stone, which are said to have been look-out towers whence watchers on land communicated the whereabouts of the fish to those at sea; these contained a small chamber below which was used as a sleeping apartment (fig. 87). Turtles appear on the carvings on the rock, and are alluded to in legend, and turtle-shell ornaments were worn; but the water is too cold for them ever to have been common, and Anakena is almost the only sandy bay where they could have come on shore.

The sole form of dress was the cloth made from the paper mulberry, and known throughout the South Seas as tapa; it was used for loin-cloths and wraps, which the Spaniards describe as fastening over one shoulder. Head-gear was a very important point, as witnessed by the way the islanders always stole the caps of the various European sailors. The natives had various forms of crowns made of feathers, some of them reserved for special occasions. Cherished feathers, particularly those of white cocks, were brought out of gourds, where they had been carefully kept, to manufacture specimens for the Expedition. The crowns are generally made to form a shade over the eyes, like the head-dresses of the images. Naturally, every effort was made to find the prototype of the image hats. No one recollected ever seeing anything precisely like it, but among the pictures drawn for us of various head-decorations was a cylindrical hat